

Ecology Standards

Eagle Ridge Academy

9.4.2.1.1

Describe factors that affect the carrying capacity of an ecosystem and relate these to population growth.

9.4.2.1.2

Explain how ecosystems can change as a result of the introduction of one of more new species. For example: The effect of migration, localized evolution or disease organism.

9.4.2.2.1

Use words and equations to differentiate between the processes of photosynthesis and respiration in terms of energy flow, beginning reactants and end products.

9.4.2.2.2

Explain how matter and energy is transformed and transferred among organisms in an ecosystem, and how energy is dissipated as heat into the environment.

9.4.4.1.1

Describe the social, economic, and ecological risks and benefits of biotechnology in agriculture and medicine. For example: Selective breeding, genetic engineering, and antibiotic development and use.

9.4.4.1.2

Describe the social, economic and ecological risks and benefits of changing a natural ecosystem as a result of human activity. For example: Changing the temperature or composition of water, air or soil; altering the populations and communities, developing artificial ecosystems; or changing the use of land or water.

9.4.4.1.3

Describe contributions from diverse cultures, including Minnesota American Indian tribes and communities, to the understanding of interactions among humans and living systems. For example: American Indian understanding of sustainable land use practices.